

REMARKS/ARGUMENTS

The present amendment is in response to Office Action mailed May 20, 2003, in which claims 11- 18 were objected. Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action and, when coupled with the above amendments, are believed to render all claims at issue patentably distinguishable over the cited references.

Claims 11 and 17 are amended. Accordingly, claims 11-18 are pending.

Applicant respectfully requests reconsideration in light of the above amendments and the following remarks.

CLAIM REJECTION - 35 U.S.C. §103 (a)

With respect to page 2 of the Office Action, the Examiner rejected claims 11-16 under 35 USC 103(a) as being unpatentable over Erk et al. (US 5,340,437) in view of IBM Technical Disclosure Bulletin Vol. 30, Issue 6, page 244. Moreover, the Examiner rejected claims 17-18 under 35 USC 103(a) as being unpatentable over Erk et al. (US 5,340,437) in view of. Gilchrist (US 6,087,240).

Applicant respectfully traverses this rejection.

The features of "immersing said substrate in a first solution which comprises a plurality of first bubbles, wherein said first solution being able to remove said first dielectric layer and part of said first bubbles are located on a first surface of first dielectric layer, said first surface being contacted with said first solution" and "immersing said substrate in a second solution which comprises a plurality of second bubbles, wherein said second solution being able to remove said second conductor layer and part of said second bubbles are located on a second surface of second conductor layer, said second surface being contacted with said second solution" of a method for forming capacitor described in claim 17 are patentable and accepted by the Examiner in the previous Official Action.

However, in the present Official Action, under 35 U.S.C. 103(a) rejection, Applicant reads the patent of Erk in detail and summarizes the feature and purpose of the patent of Erk as follows: "Froth is formed by pressurization (see col. 3, lines 20-30), the flowing froth is used to contact with wafers (see col. 2, lines 31-36, and col. 8, lines 5-9), and wafers are immersed in a flowing etchant and rotated at a speed (see col. 4, lines 22-26). Erk's object is to make a wafer uniformly etched so that the etched wafers can have a relatively low surface micro-roughness value (see col. 2, lines 13-30)." In the situation described above, there is relative movement among "flowing froth", "flowing etchant" and "rotation wafers." Therefore, the cited prior art fails to teach the function of a photoresist to protect the surface covered by froth or bubbles from being etched." These perspectives have been clearly explained by Applicant in the

Response to the first Official Action (see page 9-11 of Response to Office Action, mail date: January 3, 2003). Therefore, Erk does not teach all limitations in claim 17 in the present invention, and the purpose of Erk is different from the present invention. The present invention utilizes the bubble as a photoresist to form a capacitor with a rough surface. Erk, actually, teaches a method of forming a uniform surface. Apparently, the prior art teaches away from the present invention. It is unlikely to achieve the claimed invention with the combined prior art cited by the Examiner.

It cannot be found that Erk's purpose is to keep "flowing froth", "flowing etchant", and "rotation wafers" in relative movement for avoiding the froth or bubble location on the surface of wafer, yet, from Erk's description, it can neither be figured out nor be proved that flowing forth or bubbles would locate on the surface of the rotation wafer. Accordingly, Applicant believes that the combination of Erk's patent and Gilchist's patent teaches away from the claimed invention. Therefore, claims 17-18 are not obvious and Applicant respectfully requests the Examiner to withdraw the rejection.

In the present Official Action, in response to the reason for rejection of claims 11, 12, and 14-16, "the formation of a photoresist on a wafer is notoriously old and well known in the semiconductor fabrication art" (see page 2 last paragraph of Office Action), Applicant does not agree with the Examiner's point of view, **"the method of protecting the surface covered by froth or bubble from being etched by using froth or bubble located on the**

surface of substrate for playing the role of photoresist" of the present invention is never proposed previously and the feature has been clearly described in lines 5-22, page 6, of the original specification. Thus, this feature of the present invention is definitely not well known and is non-obvious.

Besides, in response to the rejection of claims 17-18 of the Examiner, Applicant has explained in the above description in the present response that the combination of Erk's patent and Gilchrist's patent teach away from the claim 17, and therefore claims 17-18 are not obvious. Therefore, the Applicant respectfully requests the Examiner to withdraw the rejection.

In the action, Applicant further amends claim 11 and 17, adding that "the bubbles on the surface of substrate play the role of photoresist". It is believed that there is no new matter. Thus, through the amendment described above, the Examiner's 35 U.S.C. 103(a) rejection of claims 11-18 is overcome.

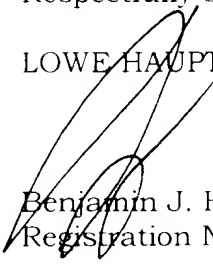
Conclusion

In light of the above amendments and remarks, Applicant respectfully submits that all of pending claims 11-18 as currently presented are in condition for allowance. Accordingly, reconsideration is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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